

REMARKS

Claims 1-4 and 20 are all the claims pending in the application; claims 1-4 have been allowed; claim 20 is rejected.

Included herewith is an amendment to claim 20 to more clearly describe the effector protein (as a fusion protein comprising a Gal4 DNA binding region and a nuclear receptor ligand binding region). Support for the amendment may be found in the specification, for example at page 19, lines 17-19, where it is stated that the effector protein is one wherein the ligand binding domain of various nuclear receptors is linked downstream of the Gal4 DNA binding region.

Applicants also include new claim 24, reciting preferred nuclear receptor ligand binding regions. Support for this new claim may be found in the specification at pages 11-13, where a list of nuclear receptors that may be used in the effector protein is provided. Preferred examples of the ligand binding regions of the nuclear receptors, as recited in claim 24, are set forth at page 13, lines 11-23.

No new matter has been added. Entry of the amendment is respectfully requested.

I. Formal Matters

A. In the Amendment filed March 11, 2003, Applicants requested that the Examiner return a signed and initialed copy of the list of references submitted with the Information Disclosure Statement filed in this application on December 23, 1999. As a signed and initialed copy of the list has not yet been returned, Applicants now respectfully renew their request. For the Examiner's convenience, Applicants enclose of copy of the list herewith.

B. Also in the Amendment filed March 11, 2003, Applicants requested that the Examiner acknowledge Applicants' claim for foreign priority, as made in the transmittal letter dated December 23, 1999. In the Office Action dated September 11, 2002, the Examiner only acknowledged receipt of the priority document. Applicants therefore respectfully renew their request for the Examiner to acknowledge Applicants' claim for foreign priority.

II. Rejection of Claims Under 35 U.S.C. §112

At page 2 of the Office Action, the rejection of claim 20 under 35 U.S.C. §112, first paragraph, as being non-enabled has been maintained.

The Examiner explains that the limitation "DNA molecule encoding an effector protein" is not supported by the specification because the specification only teaches one DNA molecule encoding an "effector protein." The Examiner states that recitation of a specific nucleic acid molecule encoding the effector protein of Figures 1-4 would obviate the rejection.

In response, Applicants note that the effector protein is comprised of two portions arranged 5' to 3': (1) the DNA binding region of the Gal4 protein, and (2) the ligand binding region of a nuclear receptor. The specification states that the ligand binding region of various nuclear receptors may be used (page 19, lines 17-19).

Furthermore, a list of nuclear receptors for use in the invention is set forth in the first full paragraph at page 11 of the specification. The following paragraph sets forth the ligand binding regions of the receptors described in the preceding paragraph. Pages 12-15 set forth preferred examples of the ligand binding regions of the receptors. The results from experiments performed

using three of the nuclear receptor ligand binding regions included in the preferred examples are shown in of the Figures 1-4.

In view of this disclosure, included herewith is an amendment to claim 20 that more specifically recites the effector protein as being a fusion between (1) the DNA binding region of the Gal4 protein, and (2) the ligand binding region of a nuclear receptor. New claim 24 has been added to recite the relevant portions of the nucleotide sequence of the preferred nuclear receptors set forth at pages 13-14 of the specification.

Applicants have fully enabled the use of a number of different ligand binding regions of nuclear receptors. Indeed, Applicants even specifically state in the specification and claims the exact amino acid sequence of suitable ligand binding domains. Moreover, Applicants have shown that three different ligand binding domains are fully functional in the claimed effector proteins. Thus, a skilled artisan would understand that the ligand binding region of any nuclear receptor could be used in the reagents taught in the instant application.

In view of the amendment to claim 20, and the comments above, Applicants respectfully assert that claim 20 is enabled, and therefore request reconsideration and withdrawal of this rejection.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.116
U.S. Appln. No. 09/446,634

Q57282

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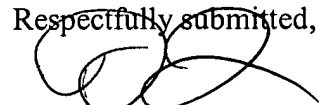
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Date: August 19, 2003